



2020 eCOMMERCE LEADERS SURVEY

Site Performance & Innovation Trends



“When they get frustrated by a slow site, shoppers’ actions are damaging to a retailer in every possible way: they leave, they buy from a competitor, and they likely won’t be coming back to the site.”

– Retail Systems Research (RSR)

The 3rd annual eCommerce Leaders Survey Report on Site Performance examines key online retail trends based on interviews with over 120 eCommerce executives from some of the industry’s biggest brands. Here are some of the key findings from this year’s report:



PRIVACY COMPLIANCE

- 67% worry that 3rd party technologies will threaten compliance with privacy laws
- 55% spend 500K to \$4M on 3rd parties each year and growing. And 20% are adding even more!

3RD PARTY TECHNOLOGIES

- 68% have multiple 3rd parties performing similar functions
- 64% say IT restricts 3rd parties due to page “heaviness”

WEBSITE SPEED

- 61% agree faster web performance results in higher conversions
- 65% believe they only have 2-3 seconds to engage shoppers

FAST FLEXIBILITY

- 62% agree that headless commerce can significantly improve engagement and conversions
- 77% are focused on closing the order and distribution management gap that Amazon has set



61% agree faster web performance results in higher conversions

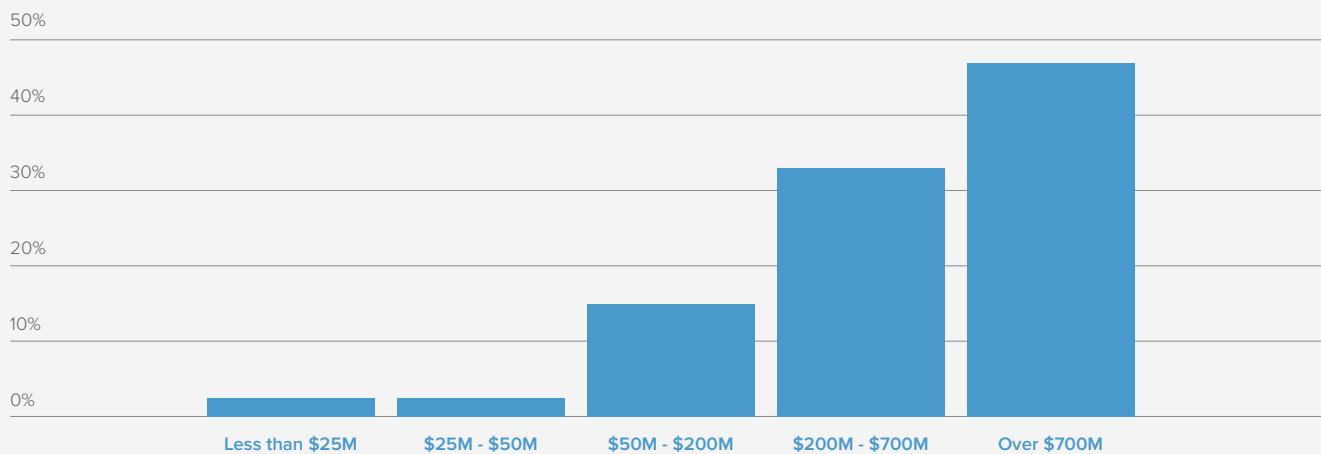
Similar to last year, the 2020 eCommerce Leaders Survey Report combines primary research data gathered from online retail executives with findings from the “eCommerce 3rd Party Technology Index”, published in October of 2019. The 3rd Party Technology Index examined the performance impact of close to 400 of the most widely adopted 3rd parties used on eCommerce sites.

Methodology

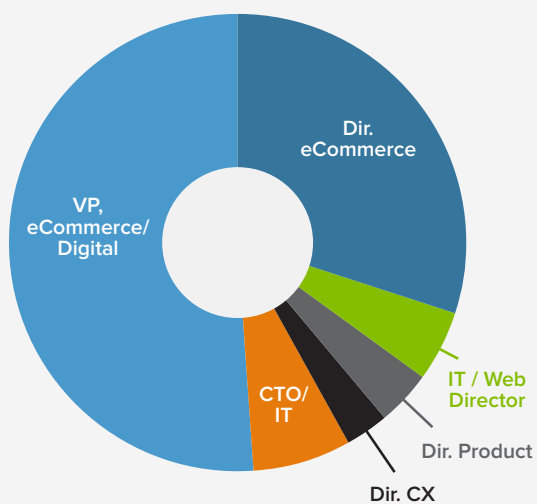
For this research report, YOTTAA interviewed **over 120** leaders from a wide range of eCommerce sites. This year, the majority of respondents are leading some of the biggest brands in the industry. In order to measure the direct impact that performance has on the bottom line, this report focuses on executive titles from the line of business, such as Vice President and Head of eCommerce. The research was collected both online and via telephone during the month of December, 2019.

RESPONDENT DEMOGRAPHICS

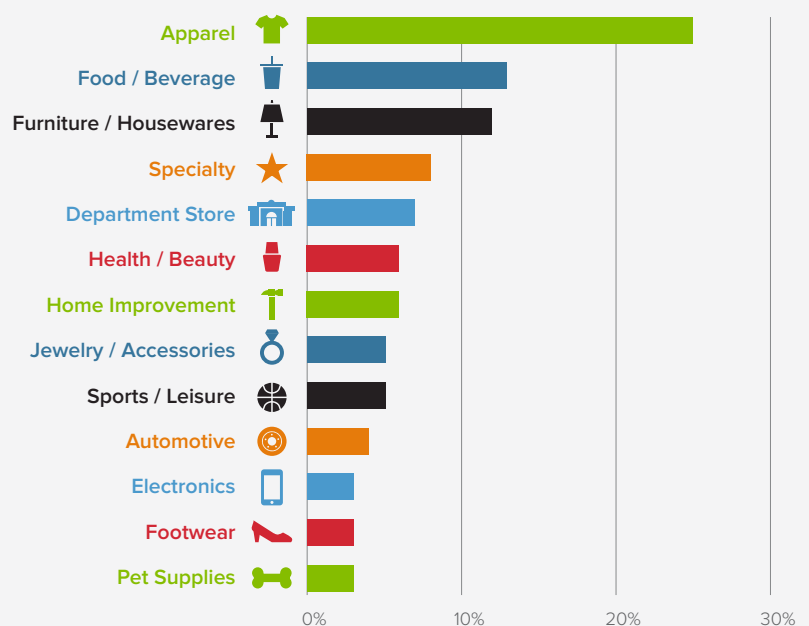
ONLINE REVENUE



TITLES



RETAIL SEGMENTS



The 2020 eCommerce Leaders Survey: Summary of Findings

1

3rd parties continue to grow but threaten privacy compliance, shopper experience, and site performance



67% of brands are concerned that at any given time, customer data captured by 3rd parties could cause them to become noncompliant with privacy policies



With retailers already averaging 50+ 3rd parties and adding 3-5 3rd parties to their sites each year, the risk to privacy compliance is increasing.

2

Gearing up to compete with Amazon



46% would consider merging their fulfillment networks with other brands to help compete with Amazon



Expect to see “Free Same Day Shipping” become a commonplace offering to compete with Amazon in 2020

3

Brands agree: speed sells



65% understand they have only 2 to 3 seconds to capture a shopper’s attention, and after that, 50% or more leave



More importantly, 61% believe faster web performance results in higher conversions

4

Heading headless commerce

61%

39%

61% are either currently leveraging or planning to leverage a headless commerce architecture in 2020



However, 60% of respondents believe headless commerce could have a negative impact on site speed because of the massive use of APIs

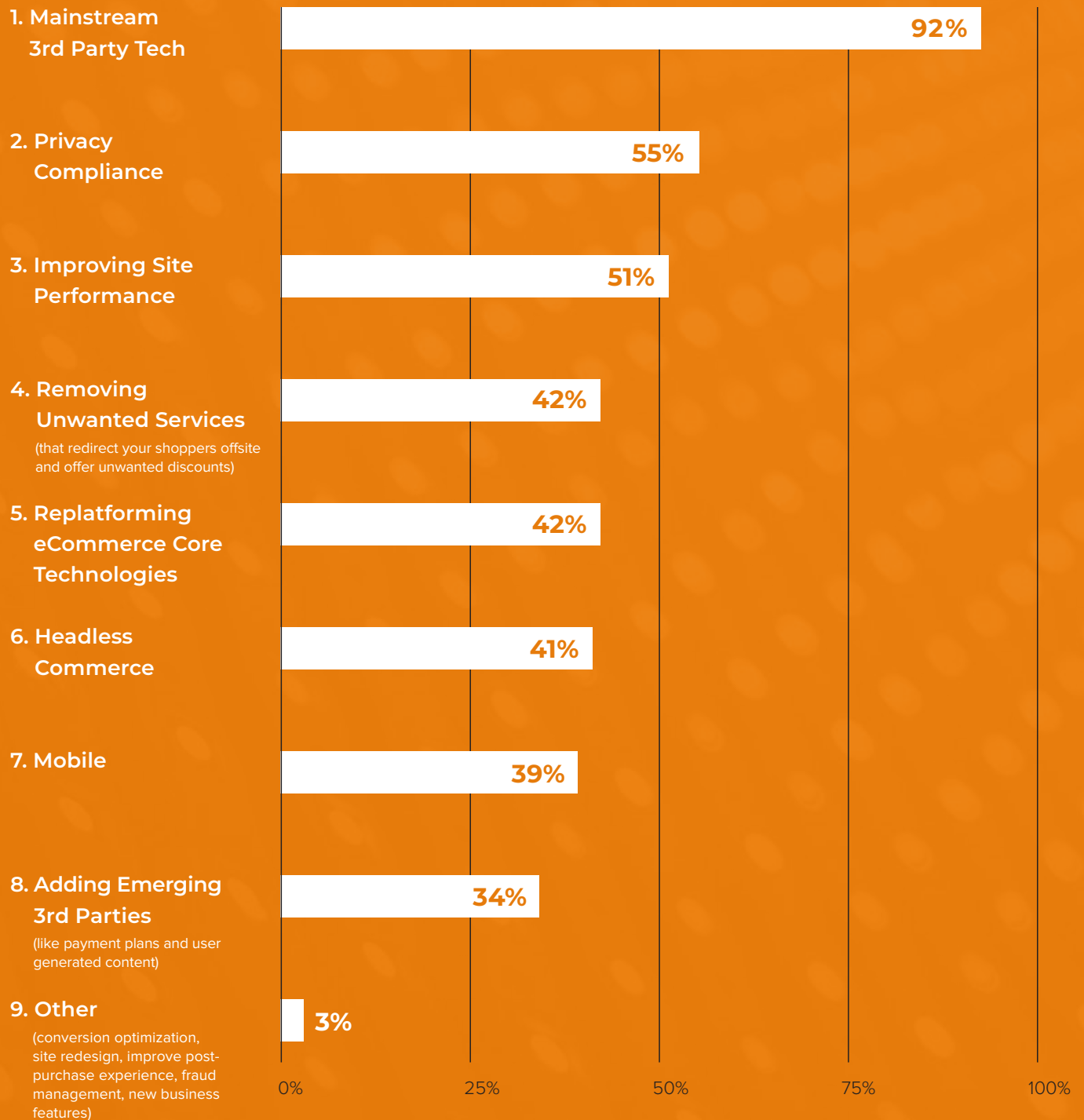
Year-Over-Year Findings

Given this is the third annual eCommerce Leaders Survey, it provides a unique ability to examine year-over-year trends. Below are a few YoY stats from 2019-2020:

	2019	2020	
Average Investment in 3rd parties annually	\$1.4 million	\$2 million	The investment in new technologies is a result of the need to provide the best online shopper experience.
New 3rd parties being added annually	3	5	New 3rd parties continue to hit the market and brands race to launch the newest features on their sites.
Trending investment initiative	Mobile	Privacy Compliance	With heavy fines and data breach consequences, retailers understand compliance has to be a top priority in 2020.
Holiday site tuning	70% tune site performance before peak holidays	77% tune site performance before peak holidays	<p>With holiday sales representing more and more of total revenue, brands are working harder and harder to prep their sites to handle the influx of shopper engagement during the Cyber 5.</p>  <p>CYBER 5 SUMMARY</p> <ul style="list-style-type: none"> Mobile: 60.5% Desktop: 35.5% Tablet: 4% <p>The chart is a stacked area graph showing 'Page View' on the y-axis and dates on the x-axis: Wednesday, Thanksgiving, Black Friday, Saturday, Sunday, and Cyber Monday. The legend indicates Mobile (green), Desktop (blue), and Tablet (orange). Mobile consistently represents the largest portion of page views, followed by Desktop, with Tablet being the smallest. There are significant peaks in traffic on Black Friday and Cyber Monday.</p>

How are retailers investing in 2020?

Online brands continue to invest heavily to make their sites more engaging and more profitable. Here are the top investment initiatives from 2020 eCommerce leaders:



1 3rd parties continue to grow but threaten privacy compliance, shopper experience, and site performance

Increase of 3rd parties is not slowing

Last year's report highlighted how online brands are adding more and more 3rd parties to their sites and retailers are not seeing the 3rd party craze dying down anytime soon. With pressure to provide the best shopper experience using the latest technologies, 34% of retailers are adding emerging 3rd parties like personalization, payment plans, and user generated content to the docket for this year.



55%

spend 500K to \$4M on 3rd parties each year and growing.

And 20% are adding even more!



64%

say their IT departments restrict adding 3rd parties.

Still, 70% plan on adding 3+ 3rd parties in 2020.



68%

of brands say they have multiple 3rd party technologies performing similar functions. Sound familiar?

3rd parties hurt shopper experience and site performance

When optimized correctly, 3rd parties are great for shopper experience, and can really help brands rise above the noise. However, 3rd parties can also really hurt site performance, and in turn shopper experience.

For example, personalization efforts are huge in the eCommerce space, but what it takes to deliver great personalization on a brand's site can actually hinder performance. Personalization technologies make shopper-specific experiences easy by doing the heavy lifting on their servers. They return personalized content that inspires shoppers to purchase, and even add new products or higher margin items to their shopping cart. So, what's the problem?

In the 2019 3rd Party Technology Index, personalization technologies were ranked worst two years in a row for having the highest negative impact on eCommerce site performance. These technologies are

clunky and complex, and can leave a site at risk for providing poor shopper experiences, potentially ruining brand perception and losing those shoppers forever.

In order to compete, 3rd parties, such as personalization, are a must-have for eCommerce sites. As long as these technologies are optimized for performance, brands will be able to reap their benefits without any catches.



PERSONALIZATION



TAG MANAGEMENT



AD TECH



SOCIAL MEDIA



CUSTOMER REVIEWS



75% of Page Load
Time is Attributed
to 3rd Parties

Emerging downside of 3rd parties? Privacy compliance is at risk

New privacy laws are complicating eCommerce

The problem with having so many 3rd parties is that retailers often lack definitive visibility into all the external technologies on their sites. This poses a threat not only to site performance, but also privacy law compliance. With the new California Consumer Privacy Act (CCPA) officially in effect as of Jan 1, 2020, online brands need to be on top of their privacy compliance game or face huge fines if shopper data is compromised.

Also known as “GDPR Lite,” CCPA places strict protections on shopper data originating from California. If your business sells to anyone in California, you are affected by this new law. Considering the majority of retailers have had consumers exercise their rights under GDPR to have data deleted from their database, brands should expect similar results from CCPA.

The industry seems to be ready to make the adjustments required by CCPA, as privacy compliance is one of the top areas of investment for retailers in 2020.




Most brands have had
customers exercise their
rights under GDPR to have
their data deleted from
their database

Where the threats lay

However, even if your business is taking the precautions required to ensure privacy compliance, you might not realize that the 3rd party technologies you are using on your site can seriously impact compliance. As exposed in the 2019 RSR Report on eCommerce website performance, many brands aren't even aware of all the 3rd party services running on site, nevermind the shopper data they are collecting. This lack of visibility can cause serious issues for not only privacy compliance, but also other policies affecting retailers regarding consumer data, like the Payment Card Industry Data Security Standard (PCI).

How serious? If you are using a 3rd party that has access to customer data, and that 3rd party gets hacked or is not in compliance with privacy laws or other security policies, your brand could suffer devastating consequences.



“The majority of brands aren’t even aware of how many 3rd parties they have on their sites” - 2019 RSR Report

67% are concerned that siloed customer data collected from 3rd parties might impact their ability to fully comply with privacy laws; and the fact that at any given time, data collected from these 3rd parties could make them become noncompliant without their knowledge.

70% of brands that are concerned about privacy policy have an annual online revenue of over \$700M. This raises a concern for smaller retailers that may not be ready to take on the complex laws. And because of their size, fines could significantly impact margin or their ability to stay in business.

Unsolicited risks

Brands have made the striking realization that Google Chrome extensions and other add-on technologies are often loaded and executed on their sites with little or no knowledge across the brand. This can result in lost revenue from shoppers inadvertently or maliciously being redirected to other sites or shoppers receiving unintended discounts.

Another scary outcome can be shopper data being taken over by bad actors putting brands at risk of not complying with privacy laws or front page headlines. In fact, this has become such an issue that removing these unwanted browser services came in fourth for online retailer investments in 2020.



60% lose \$200K+ annually (on average) due to browser extensions giving unintended discounts



42% are investing heavily in removing unwanted browser services from their sites in 2020

Taking control of 3rd party privacy compliance

Although it's great to see that many brands understand the risk of becoming noncompliant from external 3rd parties and browser elements on their sites, most retailers have a long way to go.

For instance, eCommerce privacy compliance is not a “one-and-done” deal, but an ongoing effort due to customer data constantly being added to new 3rd parties, and technology constantly changing. The complexity of it can be mind-numbing.

More than half of respondents stated that they had asked each individual 3rd party on their site if they are adhering to privacy laws. Well, it's not that simple. Just because the 3rd party is compliant at a particular moment in time doesn't mean that it will be compliant three months, or even one day later. How can brands ensure the longevity of that claim? Can they really just take the word of 3rd parties? There needs to be more diligence from the brands' end. Retailers cannot be nonchalant in this scenario — that's not going to work out well for anyone.

Brands should expect that California is not the last state to tighten up privacy compliance laws. Consumers aren't playing around when it comes to their personal information.



52% have asked each 3rd party on their site if they are in compliance with privacy laws



49%

stated they cannot turn 3rd parties on or off based on shopper location



43%

are not using technology or service providers for privacy compliance



38%

don't have a way of ensuring a noncompliant 3rd party is not being used in the state or country that enforces privacy compliance

2 Gearing up to compete with Amazon

2019 was a big year for retailers to restrategize to better compete against Amazon. For example, Nike pulled its products from Amazon, ending its partnership with the online giant. Other brands continue to sell their products on Amazon, but are trying to maximize other channels to increase direct sales.

For those brands still fighting the good fight, new options have come into play to help close the gap that Amazon has created, such as free, two-day shipping and promotional partnerships with sellers. Although almost a quarter of respondents stated they are not (foolishly) focused on closing that Amazon gap, the majority are ready for combat:

READY



65%

are utilizing personalized promotions to set them apart from other brands



46%

would consider merging their fulfillment networks with other brands

NOT READY



71%

say they are **NOT** are currently providing free, same-day shipping to customers



68%

say they **DON'T** provide promo codes for free, same-day shipping

3rd parties for the win

The best way for brands to compete with Amazon is providing a standout online shopper experience — an area where Amazon is lacking. The best online experiences can be built using 3rd party technologies. For example, personalization, reviews & ratings, user-generated content (to name a few) create lasting impressions that get shoppers to buy now and return for more.

Shopper Perspective

Which TWO (2) online features make shopping online most enjoyable?

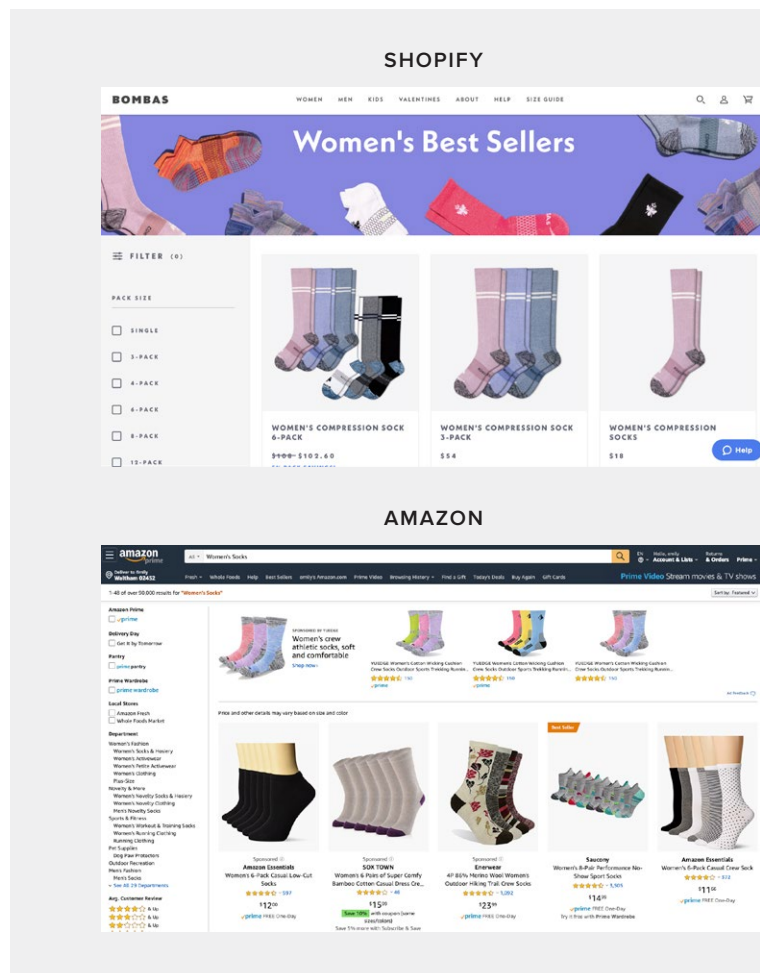


Source: RSR Research, June 2019

eCommerce platform Shopify is particularly invested in arming brands to match up to Amazon. In 2019, Shopify ramped up its competitive edge by announcing their plans to set up fulfillment centers across the US, and by acquiring a robotic fulfillment company, 6 River Systems. They've also been working with 3rd parties, like Arrive, which gives shoppers accurate and timely updates on everything they order.

Many retailers make the choice whether they want to sell on Amazon or Shopify (or any other eCommerce platform). The truth is, you can do both, and most brands do, but the better margins come from direct-to-consumer sales.

As you can see in the image to the right, the experience varies greatly from Shopify sites vs. Amazon. Optimizing for shopper experience is how brands can stand-out from Amazon and build that direct-to-consumer audience.



INDUSTRY PERSPECTIVE



"In order to compete in 2020 and beyond, eCommerce leaders need to address the macro trends in the industry, such as AI, privacy compliance, personalization, mobile experience, headless commerce, MarTech optimization, and how to compete against Amazon. The leading online retailers will be ones that create a symphony of cutting-edge technologies that work together harmoniously and help propel the shopper journey."



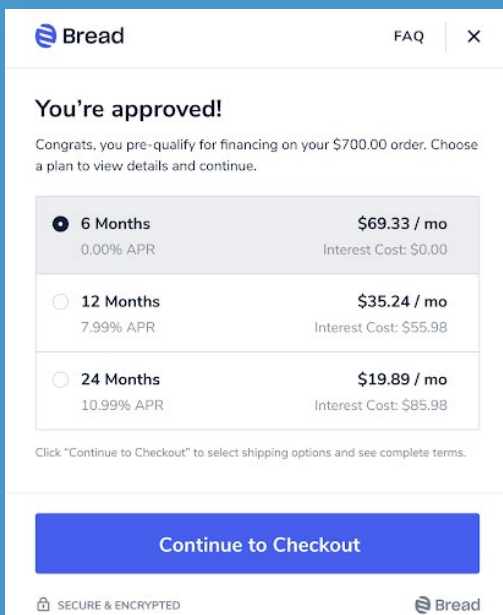
JON NORDMARK
CEO & CO-FOUNDER,
ITERATE.AI

Differentiation of your direct-to-consumer site comes from 3rd parties by providing a more experiential site. For example, 3rd parties like ShopRunner help retailers provide free two-day shipping, while Affirm and AfterPay allow shoppers to set up interest-free payment plans for their orders. These are some of the best experiences that Amazon provides to online shoppers, and are now available to all retailers through these technologies. In the 2019 3rd Party Index, there is an entire section on Emerging Technologies to help brands see what is trending in the industry and how they impact site performance.

 **SHOPRUNNER**







Bread FAQ X



You're approved!

Congrats, you pre-qualify for financing on your \$700.00 order. Choose a plan to view details and continue.

<input checked="" type="radio"/> 6 Months 0.00% APR	\$69.33 / mo Interest Cost: \$0.00
<input type="radio"/> 12 Months 7.99% APR	\$35.24 / mo Interest Cost: \$55.98
<input type="radio"/> 24 Months 10.99% APR	\$19.89 / mo Interest Cost: \$85.98





Click "Continue to Checkout" to select shipping options and see complete terms.

Continue to Checkout

 SECURE & ENCRYPTED 

3RD PARTIES

% OF SITES

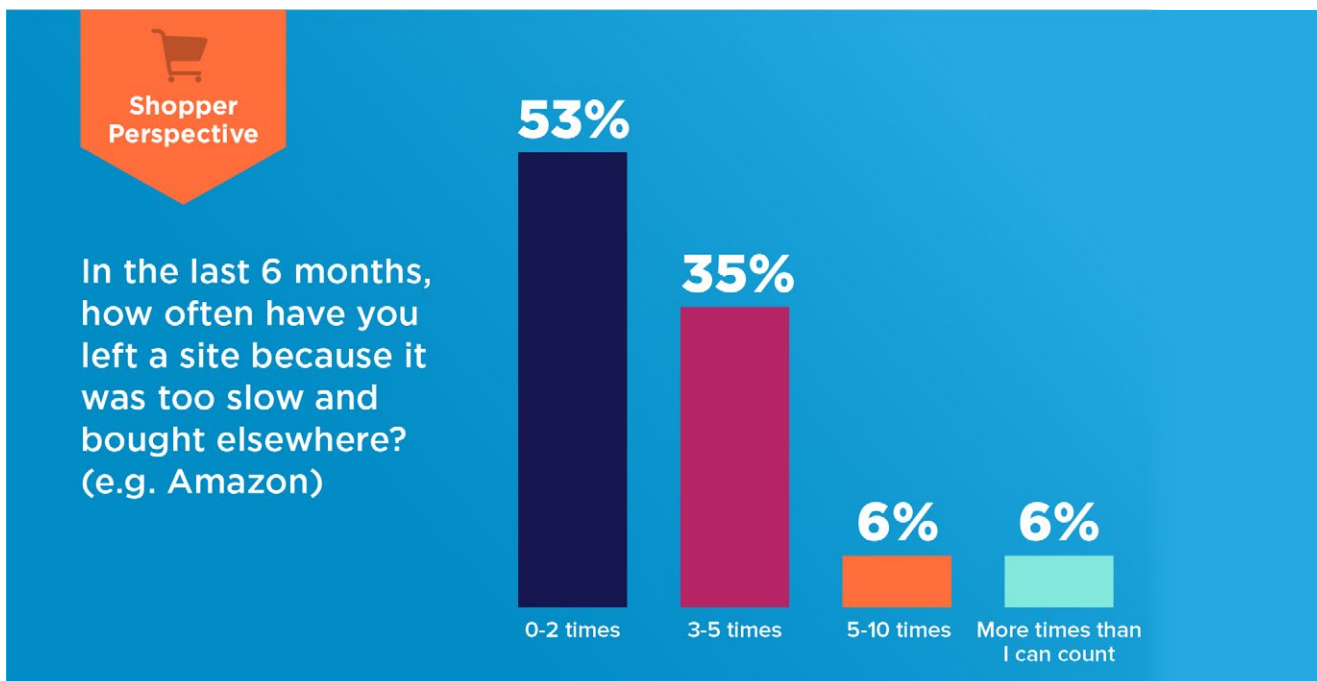
✓ LITTLE OR NO PERFORMANCE IMPACT		
	Bread	1%
	Quad Pay	1%
⚡ INCONSISTENT NEGATIVE PERFORMANCE IMPACT		
	Affirm	4%
	Klarna	3%

Source: Yottaa's 2019 3rd Party Index, October 2019

As long as brands are optimizing their 3rd parties and have full visibility into their performance, 3rd parties are the answer to help close some ground in the race against Amazon.

3 Brands agree: speed sells

As retailers focus more and more on eCommerce initiatives, site performance becomes increasingly critical, especially when it comes to mobile initiatives. A speedy and consistent online shopping experience will take customers all the way through checkout. If page load speed is lagging, shoppers will be quick to leave and head to Amazon or a competitor. Overall, a faster site equals more sales, and many brands agree.



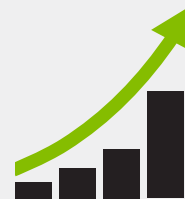
Source: RSR Research, June 2019

\$500K+

33% investing over \$500K annually to drive people to their websites

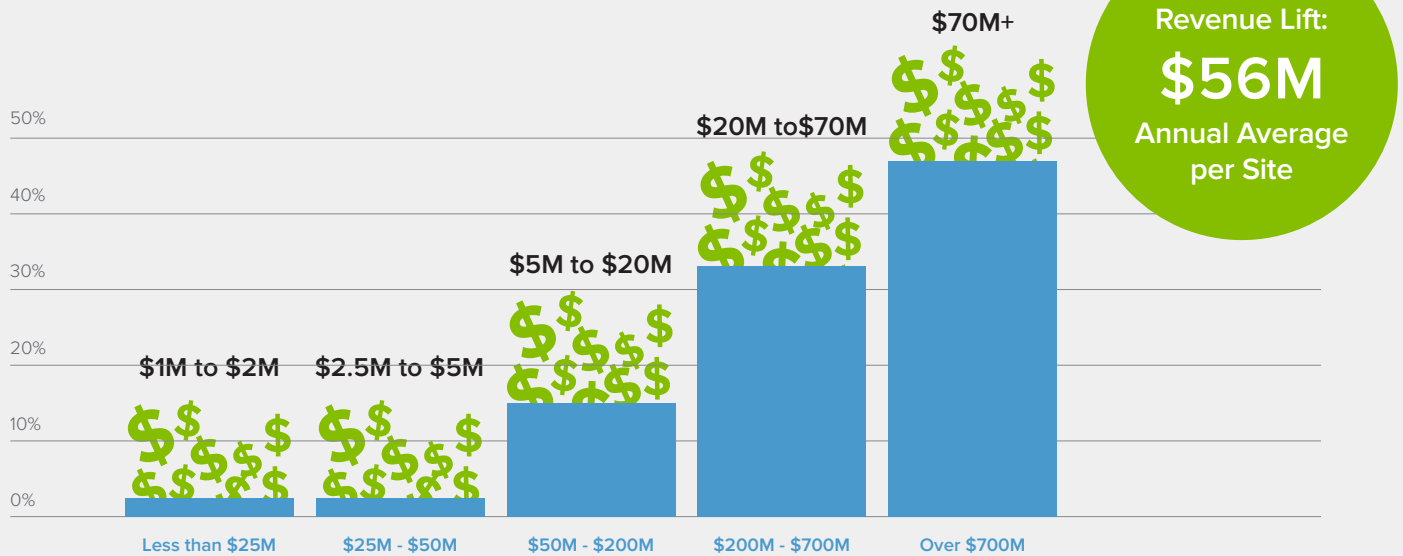


65% agree they only have 2 to 3 seconds to capture a shopper's attention, and after that, 50% or more will leave their site



61% are confident that faster web performance results in higher conversion rates

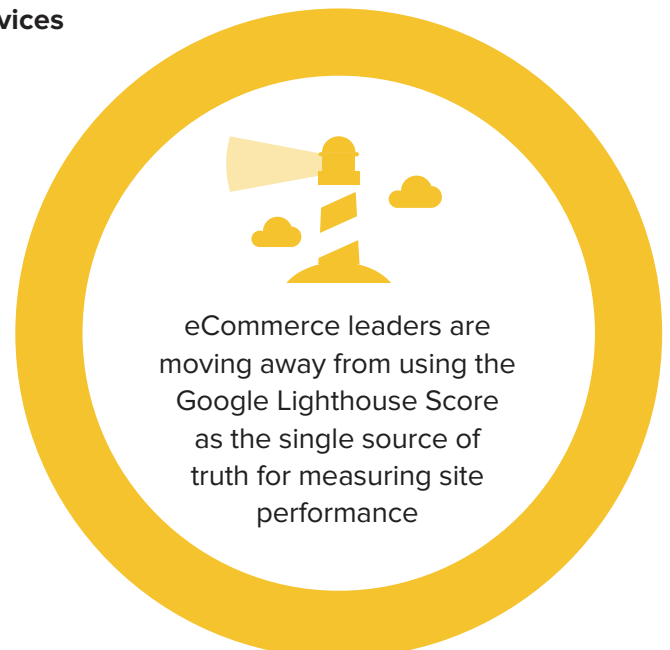
REVENUE GAINS FROM SITE PERFORMANCE OPTIMIZATION



*Assumes 10% conversion lift (for example, 2% to 2.2%) for survey respondents

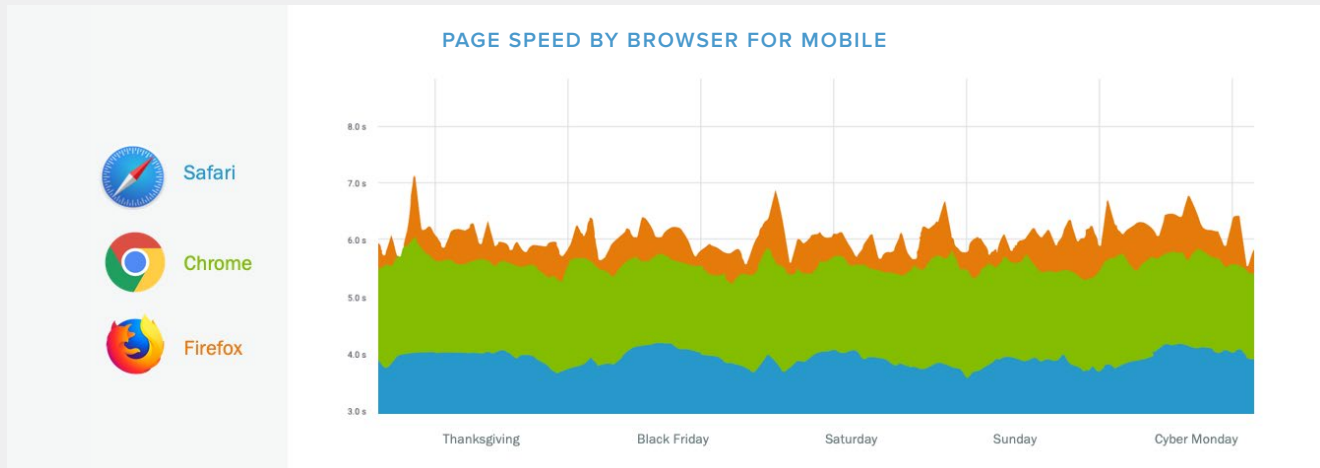
Dimming the Google Lighthouse Score

Not everyone uses page load speed as a performance indicator. For example, **Google Lighthouse Score is a popular method used by online retailers to measure performance for mobile devices on chrome browsers only.** Google knows all brands are fully engaged in improving mobile, so this is a focus of the score. However, Google creates this score by comparing sophisticated eCommerce sites against a group which includes many basic, non-eCommerce sites. As a result, most eCommerce sites will never rank favorably in terms of Lighthouse Scores, no matter how fast your pages are loading.

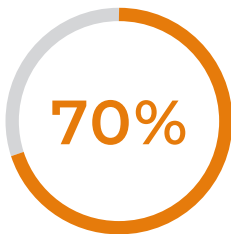




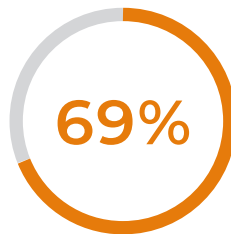
Google Lighthouse Score is a popular method used by online retailers to measure performance for mobile devices on chrome browsers only. However, Google Chrome Browsers perform twice as slow as Safari. No wonder Google has its own standard for measuring speed and performance.



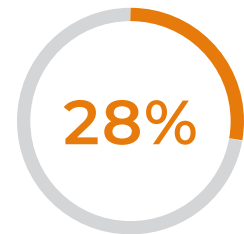
Retail leaders are trying to get on Google's good side by investing in Accelerated Mobile Pages (AMP) and Progressive Web Apps (PWA) in 2020. By meeting the standard framework for fast-loading mobile pages, brands can hit a higher mobile SEO ranking, driving more traffic to their sites and potentially boosting their Lighthouse Score — however that's not known for sure.



state the Google Lighthouse Score is "nice" but don't heavily rely on it to build their site improvement strategies



understand the Google Lighthouse Score is comparing their complex eCommerce site to simple, non-eCommerce sites



including the biggest brands surveyed, do NOT believe Google Lighthouse data is an accurate representation of their site's performance

4 Heading headless commerce

Another main initiative for retailers this year is replatforming, with **45% of respondents planning to replatform within the next 12 months.**

So, how will 2020 be remembered? It will be the year of headless commerce. The industry has been talking about modern microservices architecture since 2012 and it is finally becoming a reality.

But why is headless commerce becoming so popular? Some of the main drivers for making the switch include the ability to provide a dynamic and unique UX for shoppers, and the flexibility to upgrade technology in smaller segments.



Over 60% say they are currently leveraging or planning to leverage a headless commerce architecture

Shift in Architecture

Headless Commerce



Services based

What is headless commerce, now that it has finally arrived?

- The separation of the front-end and back-end of an eCommerce application.
- Microservices/API-based approach to provide brands the functionality to have custom front-end and/or CMS driven interfaces.
- Easily upgradeable vs. large platform upgrades overhead.
- A way for retailers to quickly pull together different functionalities to create new experiences.
- The front-end UX commonly uses SPA's, PWA's, AMP pages, etc. and has a strong focus on mobile.

Single Page Applications (SPAs) go hand-in-hand with replatforming and headless commerce. As a result, many retailers are taking an agile approach to going headless by starting with checkout or product detail pages.

Single Page Apps (SPA)



Progressive Web Apps

INDUSTRY PERSPECTIVE



"Because eCommerce is constantly changing as the technologies around us evolve, retailers must be agile to adapt their strategies — not as a response, but as a forethought. We work with brands all over the world, and the top initiatives we are currently seeing include headless commerce, mobile, and personalization."



BRIDGET FAHRLAND
HEAD OF DIGITAL STRATEGY,
ASTOUND COMMERCE

Brands agree that headless commerce with a customized front-end shopper experience can significantly improve shopper engagement and conversions

There are some major downsides of SPAs to consider when taking on this effort:

- Performance is negatively hit for first-time visitors, and brands may want to take a different approach for those pages
- SPAs often misinform analytics by claiming fast Document Complete Time while the page is still painting — and most importantly — the shopper is still waiting
- Inconsistent page load times kill conversions
- Headless commerce and SPA limitations increase reliance on 3rd parties, promoting another surge of 3rd parties being used in the industry

While brands go through the massive efforts to replatform, it's expected that many will start utilizing a flexible, headless commerce architecture. The majority of retailers surveyed have headless commerce in their scope, and are already leveraging or planning to leverage the architecture.

Yes, the flexible, personalized front-end experience will make shoppers happy, but the massive number of Application Programming Interfaces (APIs) that connect the data being pulled into the front-end can actually hurt site performance. Brands are aware of this possibility, and agree that a headless commerce architecture could ultimately have a negative impact on site speed.



Nearly 60% of respondents believe headless commerce could have a negative impact on site speed because of the massive use of APIs



Conclusion

Based on the responses of the eCommerce Leaders Report, overall, retailers seemed to have positioned themselves for success in 2020. Online sales look to be skyrocketing, and brands are spending in the right areas.

When it comes to eCommerce, the only consistent, time-tested dependent is change. No longer are the days driven by shoppers walking into a store and making a purchase. Brick and mortar stores are closing left and right — even malls are doomsday prepping in order to evolve with the times. But adaptation isn't the only survival factor. Retailers need to move fast.

Act fast or be last

The dramatic changes occurring in the commerce world require immediate decision making. The luxury of sitting down and building a 5-year plan is no longer a reality. With new eCommerce technologies emerging constantly, shoppers demanding everything faster, and Amazon continuing to nip at their heels, brands need to focus on future-proofing themselves.

How? Online brands should lean into flexibility and speed. This survey confirmed the move to headless commerce is growing in popularity. That's because retailers realize that monolithic platforms will keep them rigid and stuck. By decoupling the front-end experience from the back-end, brands are able to easily change brand experiences, add the latest and greatest 3rd party technologies, and keep shoppers happy with their purchasing experience.

Smart differentiation

However, it's not that simple. Being able to customize and update your site's front-end experience on-the-fly gets complicated with many moving parts and lots of room for error — especially when it comes to your 3rd party technologies.

Adding emerging 3rd parties to eCommerce sites is the key to brand differentiation, standing up to Amazon, and providing engaging shopper experiences. But don't forget: complete visibility into 3rd party technologies is critical. With the growing complexity and severity of privacy laws, the repercussions and risks for failing to comply through each and every digital element on your site at all times has increased immensely. Retailers need to take this threat seriously and start making strides to remain compliant, even during the most complex scenarios.

What can you do?

You don't have to choose between privacy compliance, securing shopper data, utilizing the best 3rd parties for your brands to compete, and site speed. You really can have it all.



Cloud-Based Experience Optimization

By optimizing your eCommerce site for performance, not only will the online shopper experience be consistent and fast, your site will be armed and organized against threats, such as becoming noncompliant to privacy laws, exposing customer data, or experiencing major performance anomalies due to increases in traffic or 3rd party failures.



See and Control 3rd Parties

The average eCommerce site has 40-60 3rd party technologies. While these 3rd parties greatly enhance online experience for your shoppers, they also have been proven to significantly slow down page load times.

Best practice: inventory, optimize, and control all your 3rd parties. By combining application sequencing, actionable analytics, and image optimization, online retail brands are enabled to speed up their sites in a matter of hours. The end result is reduced 3rd party performance violations, a super fast eCommerce site, and increased online conversions.



Control Browser-based Services

Online brands today don't have control over all the browser-based digital services on their sites. For example, Chrome extensions and other add-on technologies are often loaded and executed on a site with little or no knowledge across the brand. This results in negative outcomes such as lost revenue, data risks, and negative site performance.

Best practice: control when and where all services are being executed, including 3rd parties and internal services you intend to have on site, as well as services that are not welcome and should be blocked.



Image Optimization

Heavy imagery can really hurt page-load speed and consistency during the shopper experience.

Best practice: optimize the images on your site through transcoding, image compression, image resizing, lazy loading, and caching.



Add Layers of Security

With new threats occurring everyday, site security has become a massive challenge for eCommerce sites. Bots, DDoS, and other security attacks increase cart abandonment, negatively impact shopper experience, and decrease conversions. Online retailers need 24/7 visibility to detect security attacks as well as the ability to quickly take action to mitigate potential threats.

Best practice: optimize your site for security with comprehensive multi-layer Web Application Firewall (WAF) security controls to limit the performance impact from malicious traffic. Additional advanced security capabilities and robust bot detection and remediation stop threats and SQL/Javascript injection issues.



Speed it all up

Due to the complexity of today's eCommerce sites, the average online shopper has a 50% chance of visiting a slow loading page. Inconsistent page load times often result in shoppers abruptly ending their sessions, which lowers conversions and leaves negative consumer impressions of a brand.

Best practice: through content transformation, flexible delivery, and content optimization, your site will be fast enough to see that increase in conversion.

YOTTA

Sponsored by Yottaa, an eCommerce technology provider that helps brands optimize, accelerate, and secure digital experiences, with assistance from WBR, a leading eCommerce industry research firm.